

THE PREVALENCE OF HEALTH RISK BEHAVIOURS AMONG PHYSIOTHERAPY STUDENTS IN THE WESTERN CAPE, SOUTH AFRICA

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Abstract

Introduction: Health professionals are key role players in health promotion. The question arises of what is the risk behaviour of physiotherapy students who in the future will play a major role in health promotion.

Objective: To obtain baseline data on and to assess the prevalence of health risk behaviours of physiotherapy students.

Method: A descriptive cross sectional quantitative study using a questionnaire adapted from the Youth Risk Behaviour Questionnaire.

Participants: 332 physiotherapy students.

Setting: Physiotherapy departments at universities in the Western Cape, South Africa.

Intervention: Self-administered questionnaire on health risk behaviour.

Results: The study found that there was a high prevalence of health risk behaviours among physiotherapy students and that knowledge alone did not influence changes in behaviour.

Conclusion: The high prevalence of health risk behaviours among physiotherapy students in the current study however, indicates that knowledge alone does not influence behaviour. The study points out the need for physiotherapy programmes to equip students with more than just mere knowledge about health risk behaviours.

Introduction

Chronic diseases of lifestyle are responsible for approximately 25% of deaths of all South Africans (Bradshaw, Bourne, Schneider and Sayed 1995). While the full etiologies of these diseases are not fully understood, health risk behaviours are strongly implicated as risk factors (World Health Report, 2002). These health risk behaviours are among the leading causes of mortality and morbidity and are usually established during youth extending into adulthood (Kann, Warren, Harris, Collins,

Douglas, Collins, Williams, Ross and Kolbe, 1995). Recent studies suggest that university students in different parts of the world, including South Africa, often engage in a wide range of behaviours that place themselves and others at risk for health problems (Patrick and Coven, 1997; Nkandu and Amosun, 1997). According to the Centres for Disease Control and Prevention (1998), health risk behaviours amongst young adults and students have been defined as physical inactivity, tobacco and alcohol use,

high-risk sexual activity, poor diet and injuries (intentional and unintentional) e.g. suicide.

Health professionals are key role players in health promotion as they are expected to be role models in lifestyle behaviours in the communities in which they serve. Physiotherapists are trained to be health educators and are thus well versed in the knowledge and consequences of health risk behaviors. In a similar study, it was found that knowledge about health risk behaviour is an important factor in an informed choice concerning health life-style (Nkandu and Amosun, 1997). Considerable evidence exists that suggest that most chronic diseases of lifestyle are related and that risk behaviours increase the risk of premature morbidity (Aaron, Dearwater, Anderson, Olson, Kriska and La Porta, 1995). In addition most of the risk factors are preventable (Walker, 1995). In view of the paucity of data regarding health risk behaviours among health professional students, the main purpose of this study was to obtain baseline data on the prevalence of health risk behaviours of health professionals with the focus on physiotherapy students.

Methods

Population sample

A convenience sampling method was used to collect the data. The study population was defined as physiotherapy students registered at three tertiary institutions in the Western Cape. A total of 360 questionnaires were handed out. The response rate was 92% as 332 students returned the self-administered questionnaire.

Intervention

Data was collected by a self-administered questionnaire in a classroom situation after informed consent had been obtained. The questionnaire was adapted from the Youth Risk Behaviour Questionnaire (Kann, 2001). The questionnaire contained 30 items, which addressed demographic aspects, health risk behaviours (smoking, drinking, drug use, sexual behaviour, eating habits and physical fitness) and knowledge of health risk behaviours. The questions dealing with knowledge tested the students understanding of health risk behaviours as well as the risks associated with it. Health risk behaviours assessed related to: do they indulge in the behaviours, how often, as well as whether they have attempted to quit following knowledge obtained during their training. A pilot study was conducted on 10 physiotherapy students who were excluded from the main study. The pilot study aimed to test the adapted questionnaire to ensure that changes made to the questionnaire would still ensure that participants understood the questionnaire.

Data analyses

Categorical data were given in proportions and the differences between groups were analysed using the chi-squared test. A significance level of $p \leq 0.05$ was used.

Ethical considerations

Permission to conduct the study was obtained from the Senate Research Committee of the University of the Western Cape as well as from the relevant heads of departments to conduct research on students. Additional permission was obtained from the other two physiotherapy

departments. Written permission was obtained from each student who participated in the study. An introductory letter with brief information about the study was handed out along with the questionnaire. The students were informed that they would answer anonymously and that participation was voluntary.

Results

The response rate was 92%. Twice as many of the respondents were females, 227 (68%) vs 105 males (32%). The mean age was 20 years (SD 1.9) and the age range was 17 – 30 years. Students were representative from all four

academic years with (76/332) 23% of them being first year students, (93/332) 28% 2nd year students, (106/332) 32% third year students and (57/332) 17% fourth year students. Health risk behaviours monitored included smoking, drinking, and drug use, eating habits, sexual behaviour and physical inactivity patterns. Table 1 and Figure 1 indicate a summary of the number of students who indulged in health risk behaviours. The results shows that students significantly increase their participation in unbecoming health behaviour as they progress in their academic years.

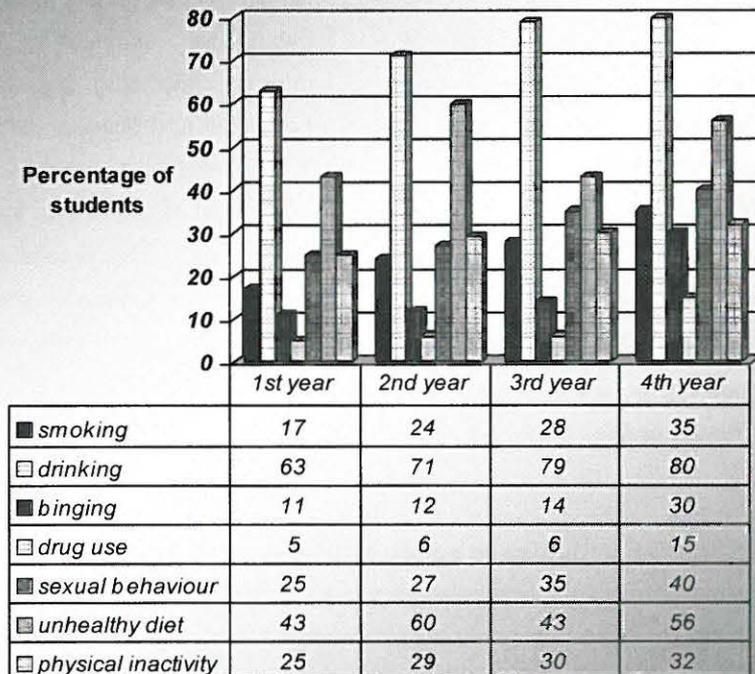
Table 1. Health risk activities in which students participated

| | 1 st year | | 2 nd year | | 3 rd year | | 4 th year | | P value |
|---------------------|----------------------|-----|----------------------|-----|----------------------|-----|----------------------|-----|---------|
| | n/N | % | n/N | % | n/N | % | n/N | % | |
| Smoking | 13/76 | 17% | 22/93 | 24% | 30/106 | 28% | 20/57 | 35% | 0.103 |
| Drinking | 48/76 | 63% | 66/93 | 71% | 84/106 | 79% | 46/57 | 80% | 0.050* |
| Binging | 8/76 | 11% | 11/93 | 12% | 15/106 | 14% | 17/57 | 30% | 0.009 |
| Drug use | 4/76 | 5% | 6/93 | 6% | 6/106 | 6% | 9/57 | 15% | 0.077 |
| Sexual behaviour | 19/76 | 25% | 25/93 | 27% | 37/106 | 35% | 23/57 | 40% | 0.167 |
| Unhealthy diet | 32/76 | 43% | 56/93 | 60% | 46/106 | 43% | 32/57 | 56% | 0.036* |
| Physical inactivity | 19/76 | 25% | 27/93 | 29% | 32/106 | 30% | 18/57 | 32% | 0.838 |

Fourth years students showed a significantly higher tendency to partake in health risk behaviours than other students. There was a statistical significant difference in behaviour between all four year levels regarding alcohol intake, binging and unhealthy diet. There was a tendency of increase in drug use and sexual activity as the year level increased. An alarming

fact is that the most common health risk behaviour among the physiotherapy students was the high incidence as well as the increase in their alcohol drinking habits. More than half of the first years students (63%) admitted that they drink alcohol and (46/57) 80% of the fourth years admitted to this habit.

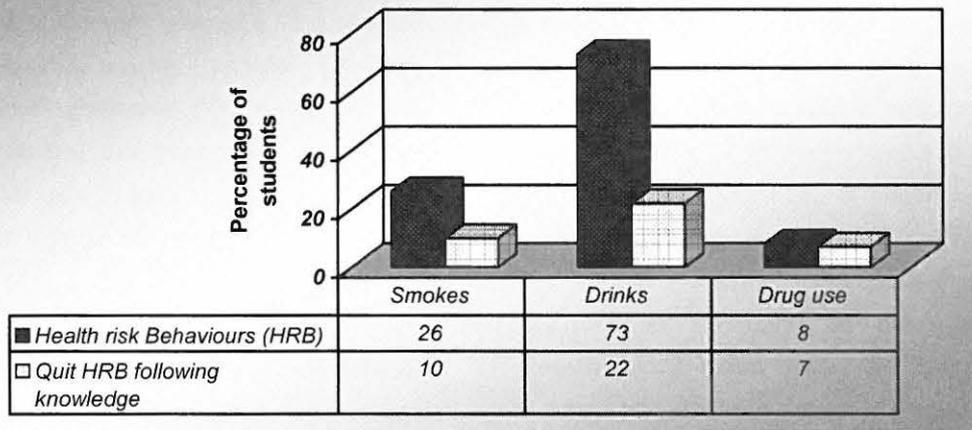
Figure 1 HEALTH RISK BEHAVIOURS



Knowledge about the majority of health risk factors was found to be good among all of the physiotherapy students. It was also significant to note that of those who were indulging in health risk behaviours, a large percentage did not attempt to change their lifestyle behaviours following the knowledge they obtained during

their physiotherapy course regarding the effects of some of the health risk behaviours. Figure 2 indicates the students who were acknowledging engaging in health risk behaviours and those who attempted to quit following the knowledge they received in their physiotherapy course.

Figure 2: Students who attempted to quit following knowledge obtained during course



Discussion

Having heard preventive messages about health risk behaviours and the effects of health risk behaviours, it is assumed that physiotherapy students should have a clear idea of practices they should or should not be indulging in. The high prevalence of health risk behaviours among physiotherapy students in the current study however, indicates that knowledge alone does not influence behaviour. This is similar to other studies conducted looking at health risk behaviours and knowledge (Franzini, Hwang and Winslow, 1992).

Currently, the health of young people - and the adults they will become - is critically linked to the health related behaviors they choose to adopt. A limited number of behaviors contribute markedly to today's major killers and these include smoking, drinking and physical inactivity. College or university is a time when many lifestyle and behavior choices are made and solidified. In the current study the behavioural

patterns of physiotherapy students is cause for concern as they have adapted the behaviours listed as major killers. The study indicates that physiotherapy students practice behaviours that place them at risk of serious health problems.

The results of this study are in contrast to a similar study by Kamwendo, Faresjo, Gustavsson and Jansson (2000) that found physiotherapy students to exhibit healthy lifestyles. The question arises whether these behavioural patterns will eventually evolve into a habit. A large percentage of the students consume alcohol and alcohol consumption may be considered among the more serious risk behaviours due to the consequences of drinking. Binge drinking also seemed to be common amongst the students in the current study. This is similar to the findings in a report from the United States (USDHHS, 2000), which indicated that young men and women between the ages of 18 and 25 years were more likely to binge drink than individuals in other age groups. Another

study by Dinger (2000) found that the environment at colleges and university tended to intensify student's alcohol consumption patterns.

Because health related behaviors are usually established in childhood, positive choices need to be promoted before unhealthy behaviors are initiated or become ingrained. Various theories suggest mean of changing or influencing behaviour. The Social Learning Theory suggests that as most behaviours are learned, they can also be unlearned or changed. According to the Health Belief Model (Brown, 1999), a person's motivation to undertake a health behaviour change can be divided into three main categories: individual perceptions, modifying behaviours and the likelihood of action. This model further explains that the perceptions of a personal health behaviour threat is itself influenced by at least three factors namely; general health values, which include interest and concern about health; specific health beliefs about vulnerability to a particular health threat; and beliefs about consequences of the health problem. Thus if the individual perceives a threat to his/her health and is cued into action then that individual is most likely to undertake the recommended preventive health action. Knowledge as indicated in the study by the participants is of a good standard but it is obvious that mere knowledge is not influencing alteration in behaviour.

Implications for research and practice

As educators how can we influence physiotherapy students to adopt a healthy lifestyle as these students have not acquired their beliefs and habits at university but already had these habits when they embarked upon their

education? The suitability of these students to act as future role models for patients who are being encouraged to exercise or stop smoking is of concern. Unless the students change their behaviour or attitudes, they could encounter a credibility problem. Perhaps we should not only be concerned with imparting knowledge on health risk behaviours but should also help students achieve behavioural changes in compliance with advice the medical profession is offering.

Acknowledgements

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Conflict of interest

None

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